

REMARKS

Drawings

Applicant submits herewith a replacement drawing sheet of Figure 1. Figure 1 has been amended to include label 24 and associated lead line for bump pad 24. In addition, Applicant has cancelled claims 12 and 13. Therefore, it is respectfully requested that the Examiner's objection to the drawings be withdrawn.

Claim Rejections

The present application has been amended in response to the Examiner's Office Action to place the application in condition for allowance. Applicant, by the amendments presented above, has made a concerted effort to present claims which clearly define over the prior art of record, and thus to place this case in condition for allowance.

In the Office Action, the Examiner rejected the claims under 35 U.S.C. §112, asserting that the disclosure is non-enabling. The Examiner is unclear where the "time data" comes from, as well as where the post processing software is located.

Basically, there is no "time data" per se. There is just impedance data, and the impedance varies with time. Hence, there is impedance vs. time data. The present invention provides that a waveform is obtain and the data is stored in a file. Post processing software is used to obtain the interconnect impedance versus time data (see, for example, the last couple sentence of the fourth paragraph of the "description" section of the application). In other words, impedance data is taken over a period of time, and this data is processed.

In the Office Action, the Examiner presented a double patenting rejection based on co-pending application no. 10/448,987. The undersigned is of the understanding that application no. 10/448,987 is currently abandoned or will be abandoned in the near future.

The Examiner also rejected the claims based on several prior art references. The independent claims have been amended to specifically claim that the tester obtain a waveform from the DSO and stores data in a file, where the data is useable to obtain interconnect impedance versus time data. None of the references appear to disclose or suggest as such. In rejecting original claims 14 and 27, the Examiner cited Rutten ('726) as teaching a test head configured to obtain a waveform and store the data in a file. Upon studying Rutten ('726), Rutten ('726) discloses that test equipment 310 sends out a series of periodic pulses, and that an oscillator 530b can be used to generate the periodic pulses locally by converting a low-frequency test signal (received from the test equipment) into a higher-frequency oscillation signal that is applied to the DUT (see paragraph 0027). The reference does not disclose that the oscillator launches a signal, receives a reflected signal and provides the reflected signal to a tester, where the tester obtains a waveform from the oscillator and stores data in a file, wherein the data is useable to obtain interconnect impedance versus time data. Yet, this is effectively what is now being specifically claimed in the amended independent claims of the present application.

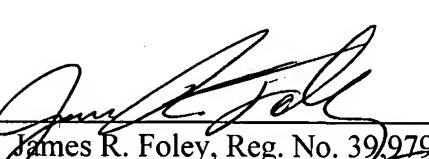
Applicant respectfully submits that the independent claims, and those claims which depend therefrom, are allowable over the prior art made of record including, for example, Hembree et al. ('848) and Rutten ('726).

In view of the above amendments, Applicant respectfully submits that the claims of the application are allowable over the rejections of the Examiner. Should the present claims not be deemed adequate to effectively define the patentable subject matter, the Examiner is respectfully urged to call the undersigned attorney of record to discuss the claims in an effort to reach an agreement toward allowance of the present application.

Respectfully submitted,

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By:



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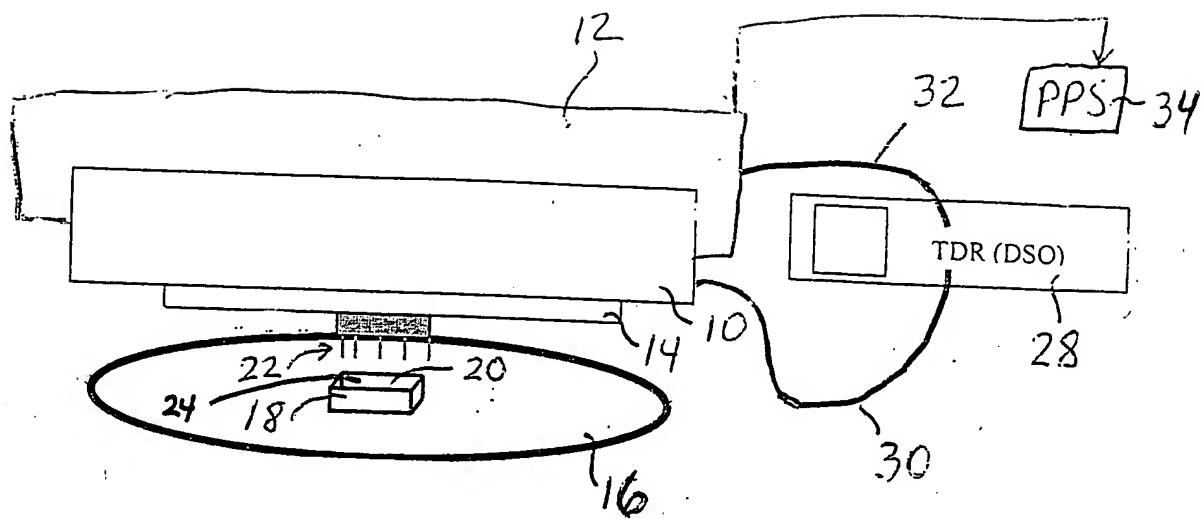


FIG. 1